



EAGLE ROOFING PRODUCTS

3546 N. Riverside Avenue
Rialto, CA 92377

www.eagleroofting.com

CONCRETE ROOF TILES

CSI Section: 07 32 16 Concrete Roof Tiles

1.0 RECOGNITION

The Eagle Roofing Product’s Eagle and Eaglelite Interlocking Concrete Roofing Tiles recognized in this report have been evaluated for use as concrete roof tiles. The weather resistance, wind uplift resistance, and fire classification properties of the roof tiles comply with the intent of the provisions of the following codes and regulations:

- 2021, 2018, 2015, 2012 2009, and 2006 International Building Code® (IBC)
- 2021, 2018, 2015, 2012 2009, and 2006 International Residential Code® (IRC)
- 2022, and 2019, California Building Code (CBC) – Supplement attached
- 2022 and 2019 California Residential Code (CRC) – Supplement attached
- 2020 Florida Building Code, Building (FBC-Building) – Supplement attached
- 2020 Florida Building Code, Residential (FBC, Residential) – Supplement attached

2.0 LIMITATIONS

Eagle Roofing Product’s Eagle and Eaglelite Interlocking Concrete Roofing Tiles recognized in this report are subject to the following limitations:

2.1 The roof tiles shall be manufactured, identified and installed in accordance with this report, and the applicable code In the event of a conflict this report governs.

2.2 Eagle Roofing Product’s Concrete Roof Tile shall be installed on roof slopes of 2½ units vertical in 12 units horizontal (21-percent slope) or greater.” IBC Section 1507.3.2.

2.3 The supporting structure shall be designed to support the loads and is beyond the scope of this report.

2.4 The roof tiles are produced in Sumterville, FL; Rialto, CA; Stockton, CA; and Phoenix, AZ as noted in Tables 2A through 2C of this report.

3.0 PRODUCT USE

3.1 General: Eagle Roofing Product’s Concrete Roof Tiles shall be used as a roof covering in accordance with IBC Section 1503 or IRC Section 903 as applicable.

3.2 Installation:

3.2.1 Installation in Accordance with the 2021 and 2018 IBC or IRC: Eagle Roofing Product’s Eagle and Eaglelite Interlocking Concrete Roofing Tiles recognized in this report shall be installed in accordance with IBC Section 1507.3 or IRC Section R905.3, including the attachment requirements of IBC Section 1507.3.7 or IRC Section R905.3.7, as applicable. Underlayment shall conform to IBC Section 1507.1.1 or IRC Section R905.1.1.

3.2.2 Installation in Accordance with the 2015, 2012, 2009, or 2006 IBC or IRC: Eagle Roofing Product’s Eagle and Eaglelite Interlocking Concrete Roofing Tiles recognized in this report shall be fastened in accordance with the code specific requirements in Table 1 of this report using The Concrete and Clay Roof Tile Installation Manual dated July 2015, published by the Tile Roofing Institute and the Western States Roofing Contractors Association. The July 2015 TRI manual is associated with ER-2015 in the UES Evaluation Report Directory and available for download at www.uniform-es.org.

TABLE 1 – ATTACHMENT DESIGN

Applicable Code	Criteria for Applicability	Design Information Location
2015 or 2012 IBC	Ultimate Design Wind Speeds (V_{ult}) \leq 130 MPH and Mean Roof Height \leq 60 feet	Roof Tile Installation Manual & Table 1507.3.7 of the applicable IBC
2009 or 2006 IBC	Basic Wind Speed (3 sec gust) \leq 100 mph and Mean Roof Height \leq 60 feet	
2015, 2012, 2009 or 2006 IRC	Mean Roof Height \leq 40 feet	Roof Tile Installation Manual & Section R905.3.7

For SI: 1 foot = 305 mm, 1 mph = 1.6 m/s

3.3 Anchoring: Eagle Roofing Product’s Eagle and Eaglelite Interlocking Concrete Roofing Tiles recognized in this report may be anchored using mortar in accordance with the applicable building code and, where permitted, the TRI Manual or adhesively attached in accordance with the adhesive manufacturer’s research report issued by an approved evaluation service agency.

4.0 PRODUCT DESCRIPTION

4.1 General: Eagle Roofing Product’s Concrete Roof Tiles recognized in this report satisfy the requirements of ASTM C1492-03. Eagle Roofing Product’s Concrete Roof Tiles

The product described in this Uniform Evaluation Service (UES) Report has been evaluated as an alternative material, design or method of construction in order to satisfy and comply with the intent of the provision of the code, as noted in this report, and for at least equivalence to that prescribed in the code in quality, strength, effectiveness, fire resistance, durability and safety, as applicable, in accordance with IBC Section 104.11. This document shall only be reproduced in its entirety.



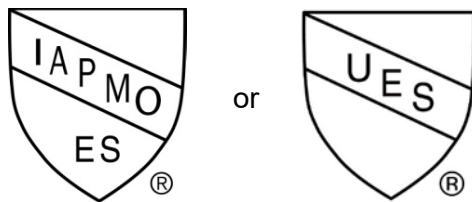


installation shall be in accordance with the applicable code, the Concrete and Clay Roof Tile Installation Manual dated July 2015, published by the Tile Roofing Institute and the Western States Roofing Contractors Association, and this report. In the event of a conflict, provisions of this report govern. The TRI manual is available for download attached to [ER-2015](#) from the UES website at www.uniform-es.org. The Eagle roof tiles and Eaglelite roof tiles are similar in production except that the Eaglelite tiles are produced with lightweight aggregates in lieu of sand. Figure 1 of this report includes typical profiles of the Eagle roof tiles.

4.2 Fire Classification: Eagle Roofing Product’s Concrete Roof Tiles, when installed in accordance with this report on minimum 15/32-inch-thick (12 mm) plywood solid sheathing or non-combustible decks, the assembly incorporating the roof tiles achieve an ASTM E108 Class A rating accordance with Section 1505.2 of the IBC and Section R902.1 of the IRC, as applicable. Roof classifications for adhesively attached systems shall be in accordance with the adhesive manufacturer’s approved research report.

5.0 IDENTIFICATION

Shipping pallets are identified with the report holder’s name (Eagle Roofing Products), manufacturing location address, product name, installed weight, shift and date of production, the UES Mark of conformity and evaluation report number (ER-1900). The tiles produced in the Sumterville, Florida, manufacturing facility are additionally identified with “Florida” imprinted on each tile. Either UES Mark of Conformity may also be used as shown below:



IAPMO UES ER-1900

6.0 SUBSTANTIATING DATA

Data in accordance with ICC-ES AC180, manufacturer’s descriptive literature and installation instructions. Test reports are from laboratories in compliance with ISO/IEC 17025. Eagle Roofing Product’s Concrete Roof Tiles are manufactured in the facilities specified in Tables 2A through 2C of this report, under a quality control program.

7.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research completed by IAPMO Uniform Evaluation Service on Eagle Roofing Product’s Concrete Roof Tiles to assess its conformance to the codes and standards shown in Section 1.0 of this report and documents the product’s certification. Products are manufactured at the locations noted in Section 2.5 of this report under a quality control program with periodic inspections under the supervision of IAPMO UES.

For additional information about this evaluation report please visit www.uniform-es.org or email us at info@uniform-es.org



TABLE 2A - Tiles Manufactured at Rialto or Stockton, California

Tile	Installed Dry Weight ¹ (psf)	Dimensions ² (inch)	Tile Factor		Tile Type
		Length X Width	TF (ft ³)	Ratio ¹	
Capistrano	9.0	17 X 12 ³ / ₈	1.4625	1.039	Type I – High Profile
Malibu	9.0	17 X 12 ³ / ₈	1.486	1.056	Type II – Medium Profile
Bel Air	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Ponderosa	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Golden Eagle	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Double Eagle Ponderosa	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Tapered Slate	9.7	17 x 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Estate	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Double Eagle Bel Air	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Eaglelite Capistrano	5.7	17 X 12 ³ / ₈	1.4625	1.039	Type I – High Profile
Eaglelite Malibu	5.5	17 X 12 ³ / ₈	1.486	1.056	Type II – Medium Profile
Eaglelite Ponderosa	7.2	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Eaglelite Bel Air	7.2	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Eaglelite Double Eagle Ponderosa	7.2	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Eaglelite Estate	7.2	17 x 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Eaglelite Golden Eagle	7.2	17 x 12 ³ / ₈	1.4683	1.044	Type III – Low Profile

For SI: 1 inch = 25.4 mm, 1 psf = 4.88 kg/m²

TABLE 2B - Tiles Manufactured at Phoenix, Arizona

Tile	Installed Dry Weight ¹ (psf)	Dimensions ² (inch)	Tile Factor		Tile Type
		Length X Width	TF (ft ³)	Ratio ¹	
Capistrano	9.0	17 X 12 ³ / ₈	1.4625	1.039	Type I – High Profile
Malibu	9.0	17 X 12 ³ / ₈	1.486	1.056	Type II – Medium Profile
Bel Air	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Estate	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Double Eagle Bel Air	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Ponderosa	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Double Eagle Ponderosa	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Tapered Slate	9.7	17 x 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Golden Eagle	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile

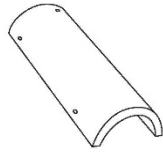
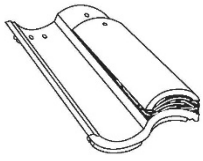
For SI: 1 inch = 25.4 mm, 1 psf = 4.88 kg/m²

TABLE 2C - Tiles Manufactured at Sumterville, Florida

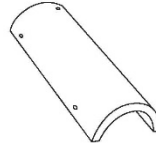
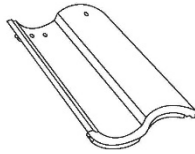
Tile	Installed Dry Weight ¹ (psf)	Dimensions ² (inch)	Tile Factor		Tile Type
		Length X Width	TF (ft ³)	Ratio ¹	
Capistrano	8.8	17 X 12 ³ / ₈	1.4625	1.039	Type I – High Profile
Malibu	7.95	17 X 12 ³ / ₈	1.486	1.056	Type II – Medium Profile
Bel Air	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Estate	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Double Eagle Bel Air	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Ponderosa	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Double Eagle Ponderosa	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Tapered Slate	9.7	17 x 12 ³ / ₈	1.4683	1.044	Type III – Low Profile
Golden Eagle	9.7	17 X 12 ³ / ₈	1.4683	1.044	Type III – Low Profile

For SI: 1 inch = 25.4 mm, 1 psf = 4.88 kg/m²

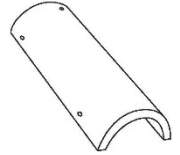
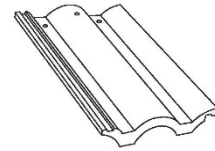
- Notes: 1. Used on a 3-inch headlap
2. Nominal Dimension



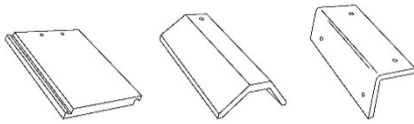
Boosted Capistrano



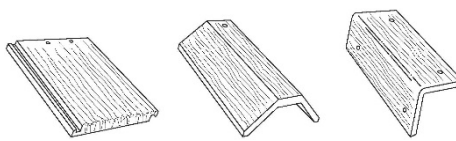
Capistrano



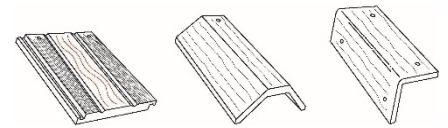
Malibu



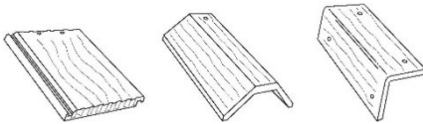
Bel Air



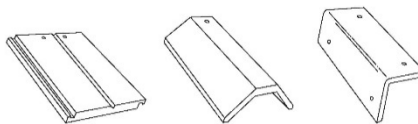
Ponderosa



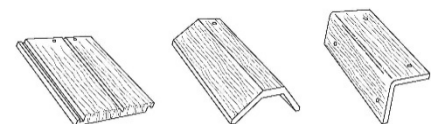
Golden Eagle



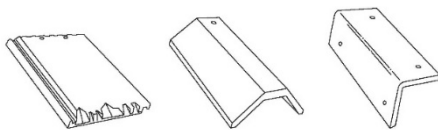
Estate



Double Eagle Bel Air



Double Eagle Ponderosa



Tapered Slate

**FIGURE 1
CONCRETE TILE AND TRIM PROFILES**



CALIFORNIA SUPPLEMENT

EAGLE ROOFING PRODUCTS

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EAGLE ROOFING PRODUCTS – CONCRETE ROOF TILES

CSI Section: 07 32 16 Concrete Roof Tiles

1.0 RECOGNITION

The Eagle and Eaglelite Interlocking Concrete Roof Tiles recognized and installed in accordance with IAPMO UES ER-1900 and as noted in this supplement are satisfactory alternatives to the following codes and regulations:

- 2022 and 2019 California Building Code (CBC)
- 2022 and 2019 California Residential Code (CRC)

2.0 PRODUCT USE

2.1 Class A, B or C Roof Covering. Eagle and Eaglelite Interlocking Concrete Roof Tiles may be used as a Class A, B, or C roof covering systems complying with Sections 1505.1 of the CBC or R902.1 of the CRC when installed in accordance with ER-1900.

2.2 Fire Hazard Severity Zones or as a Wildland-Urban Interface Zones. Roofs constructed in geographical areas designated as Fire Hazard Severity Zones or as a Wildland-Urban Interface shall satisfy ER-1900 and the following in accordance with CBC Section 705A or CRC R337.5.2:

2.2.1 Roof assemblies shall be Class A when tested in accordance with ASTM E108 or UL790.

2.2.2 Where the roofing profile includes an airspace under the roof covering, installed over a combustible deck, the following shall be included:

2.2.2.1 Underlayment. A Class A fire rated roof underlayment tested according to ASTM E108, 72 lb. (32.7 kg) cap sheet complying with ASTM D3909, or a minimum 1-inch (25.4 mm) of mineral wool board or other noncombustible material be located between the roofing material and the wood framing or deck. If the sheathing consists of exterior fire retardant-treated wood, the underlayment shall not be required to comply with a Class A classification.

2.2.2.2 Birdstops shall be used at the eaves when the profile fits, to prevent debris at the eave.

2.2.2.3 Hip and Ridge caps shall be mudded in to prevent intrusion of fire or embers.

2.3 General Installation. The design and installation of the Eagle and Eaglelite Interlocking Concrete Roof Tiles shall be in accordance with Section 1507.3 of the CBC or Section 905.3 of the CRC, as applicable.

2.4 Attachment. Attachment of the concrete roof tiles shall be in accordance with CBC Sections 1507.3.7 and 1609.5 or CRC Section 905.3, as applicable.

2.5 Eagle and Eaglelite Interlocking Concrete Roof Tiles used on structures regulated by the Division of the State Architect, or the Office of Statewide Planning and Development are subject to installation provisions in CBC Section 1513.

2.6 This supplement expires concurrently with ER-1900.

For additional information about this evaluation report please visit www.uniform-es.org or email at info@uniform-es.org



FLORIDA SUPPLEMENT

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CONCRETE ROOF TILES

CSI Section: 07 32 16 Concrete Roof Tiles

1.0 RECOGNITION

The Eagle and Eaglelite Interlocking Concrete Roof Tiles evaluated in IAPMO UES ER-1900 are satisfactory alternatives to the following codes and regulations:

- 2020 Florida Building Code, Building (FBC, Building)
- 2020 Florida Building Code, Residential (FBC, Residential)

2.0 LIMITATIONS

Use of Eagle and Eaglelite Interlocking Concrete Roof Tiles evaluated in IAPMO UES ER-1900 and this supplement is subject to the following limitations:

2.1 Verification shall be provided that a quality assurance agency audits the manufacturers quality assurance program and audits the production quality of products, in accordance with Section (5)(d) of Florida Rule 61G20-3.008. The quality assurance agency shall be approved by the Commission (or the building official when the report holder does not possess an approval by the Commission).

2.2 Evaluation to the high-velocity hurricane zone provisions in Section 1512 of the FBC, Building and Chapter 44 of the FBC, Residential is beyond the scope of this report.

2.3 The installation of tile on a minimum 2 units vertical in 12 units horizontal (1.67 percent) is allowed by FRSA/TRI Florida High Wind Concrete and Clay installation manual for installations with a sealed roof underlayment system with a code approved adhesive.

2.4 This supplement expires concurrently with ER-1900.

3.0 PRODUCT USE

The design and installation of the Eagle and Eaglelite Interlocking Concrete Roofing Tiles shall be in accordance with the 2018 International Building Code and the 2018 International Residential Code as noted in ER-1900. From FBC-Building Section 1507.3 and FBC-Residential Section R905.3 we see that the installation of the Eagle Roofing concrete roof tiles “shall be in accordance with the requirements of the FRSA/TRI *Florida High Wind Concrete and Clay Roof Tile Installation Manual*, Seventh Edition where the V_{asd} is determined in accordance with” FBC, Building Section 1609.3.1, FBC, Residential Section R301.2.1.3, or the recommendations of RAS 118-20, 0119-20, 120-20, and 127-20.

Load combinations shall be in accordance with Sections 1605.2 or 1605.3 of the FBC, Building, as applicable.

Design wind loads shall be in accordance with Section 1609.5 of the FBC, Building or Section R301.2.1 of the FBC, Residential, as applicable.

For additional information about this evaluation report please visit www.uniform-es.org or email at info@uniform-es.org